

**Amendments to the Specification:**

Please amend the specification as follows:

Please replace the paragraph bridging pages 1 and 2 (page 1, line 12 to page 2, line 4), with the following rewritten paragraph:

Power control devices of the above-described type include an electric power storage device so that a predetermined amount of electric power is supplied to a load even under occurrence of load variations, and/or power supply variations. Electric energy stored in the power storage device is used for supply of power to the load. For example, an uninterruptable power source comprises an AC/DC converter converting AC power to the corresponding DC power, a DC/AC inverter converting the DC power delivered from the converter to the corresponding AC power which is supplied to a load, and an electric power storage device connected between the converter and inverter. An AC input is converted by the ~~DC/AC~~ AC/DC converter to the corresponding DC output under a normal condition. The DC output is converted by the inverter to an AC output having a desired current, voltage and frequency, the AC output being supplied to the load. The aforesaid DC output is partly used for charge to the power storage device, whereupon electric energy is stored in the power storage device. The electric energy stored in the power storage device is supplied to the load side upon occurrence of power failure. As a result, the load can be prevented from an interrupt.

Please replace paragraph starting at page 3, 2<sup>nd</sup> full paragraph (lines 10-15), with the following rewritten paragraph:

The present invention provides a power control device comprising an electric power storage device provided across a power supply line for a load and including ~~an~~ at least one electric double layer capacitor (EDLC) bank and a secondary battery combined with the EDLC bank, the EDLC bank including a

plurality of parallel-connected rows of EDLC ~~device~~ unit cells, each of ~~which the~~ rows includes including a plurality of series-connected EDLC unit cells, and a control device controlling the electric power storage device so that when an input power to the electric power storage device is interrupted so as to result in a power interrupt, the EDLC bank supplies electric power to the load for an initial period of the power interrupt, and thereafter the secondary battery supplies electric power to the load.

Please replace paragraph starting at page 4, 1<sup>st</sup> full paragraph (lines 13-25), with the following rewritten paragraph:

Furthermore ~~In a first preferred form,~~ the electric power storage device includes at least one EDLC bank and a secondary battery combined with the EDLC bank. Consequently, a high energy density of the secondary battery can be obtained as well as the high-speed charging and discharging performances, high charging efficiency and high output density of the EDLC bank. For example, a regenerative power obtained from the load in a short time is stored in the EDLC bank, whereas a regenerative power gradually obtained from the load in a long time is stored in the secondary battery. Further, provision of the secondary battery can realize power backup for a long time. Accordingly, supply of power to the load can be rendered possible for a long time even in power stoppage.

Please replace paragraph bridging pages 4 and 5 (page 4, line 26 to page 5, line 9), with the following rewritten paragraph:

Still further ~~In a second preferred form,~~ the electric power storage device includes at least one EDLC bank and an aluminum solid electrolytic capacitor combined with the EDLC bank. An aluminum solid electrolytic capacitor can absorb switching ripple current from the converter and the inverter. Further, a

power variation in which frequency twice as high as that of a fundamental wave occurs at the DC side in an arrangement of compensating unbalance in a power system to which the inverter is connected or of converting the DC power from the electric power storage device to an AC power which is supplied to an unbalanced load. The aluminum solid electrolytic capacitor can also absorb the aforesaid power variation.

Please replace paragraph starting at page 5, 2<sup>nd</sup> full paragraph (lines 18-22), with the following rewritten paragraph:

Yet still further ~~In a third preferred form~~, the electric power storage device includes at least one EDLC bank, an aluminum solid electrolytic capacitor and a secondary battery, the latter two of which are combined with the EDLC bank. Consequently, the above-described effects can be achieved simultaneously.

Please replace paragraph bridging pages 5 and 6 (page 5, line 23 to page 6, line 16), with the following rewritten paragraph:

Furthermore ~~In a fourth preferred form~~, each EDLC unit cell has an internal resistance which is at or below 2 m $\Omega$  and a product of an electrostatic capacity of each EDLC unit cell by the internal resistance thereof is at or below 4  $\Omega$ F. The arrangement is suitable for a case where variations at intervals of several hours or less in the load or power supply is leveled by energy stored in the EDLC. For example, electric power is supplied to a load varying at an interval shorter than several hours so that the load is leveled, whereupon influences on the power system can be rendered smaller. In this usage in which the power supply variations are compensated, power input to and output from the EDLC bank are frequent. As a result, loss of power due to an internal resistance tends to be increased. In accordance with the fourth preferred form,

however, the internal resistance of each EDLC unit cell is set at a small value. Further, the internal resistance of each cell also depends upon the electrostatic capacity thereof. Accordingly, the product of the electrostatic capacity by the internal resistance serves as a value evaluating the internal resistance in the relationship with the electrostatic capacity and is set at a small value. Consequently, power loss can be reduced in the EDLC bank and the efficiency can be improved.

Please replace paragraph bridging pages 6 and 7 (page 6, line 17 to page 7, line 2), with the following rewritten paragraph:

Yet still further ~~In a fifth preferred form~~, when the EDLC bank is used for a primary purpose of electric power storage, each EDLC unit cell has an internal resistance which is at or below  $10\text{ m}\Omega$  and a product of an electrostatic capacity of each EDLC unit cell by the internal resistance thereof is at or below  $100\text{ }\Omega\text{F}$ . This arrangement is suitable for an uninterruptable power control unit which has a primary purpose of electric power storage while storing power for a relatively long time. More specifically, the arrangement is suitable for power control at intervals longer than several hours and equal to or shorter than several days. For example, electric power is supplied to a load varying at an interval of several days by the above-described arrangement so that the load is leveled, whereupon the power system can be operated efficiently.

Please replace paragraph starting at page 7, 2<sup>nd</sup> full paragraph (lines 14-23), with the following rewritten paragraph:

Furthermore ~~In a sixth preferred form~~, a condition expressed by  $Y > 100X^{-0.8}$  is met where Y designates an energy density of each EDLC unit cell in Wh/kg and X designates an output density of each EDLC unit cell in W/kg. The inventors inspected the Ragone plot indicative of the relationship

between energy density (Wh/kg) and output density (W/kg). The inventors then found the above-described condition from the results of the inspection. When the used EDLC unit cells meet the condition, the efficiency and performance in the power control by the EDLC bank can be rendered maximum.

Please replace paragraph bridging pages 7 and 8 (page 7, line 24 to page 8, line 2), with the following rewritten paragraph:

Yet further ~~In a seventh preferred form,~~ the electric power storage device includes at least one secondary battery having an energy density which is at or above 10 Wh/kg. This arrangement accomplishes an electric power storage device with a high energy density which cannot be achieved by the EDLC bank alone. Consequently, since an amount of energy stored is increased, electric power can be supplied to the load for a longer time.

Please replace paragraph starting at page 8, 1<sup>st</sup> full paragraph (lines 3-10), with the following rewritten paragraph:

Still yet further ~~In an eighth preferred form,~~ the electric power storage device includes at least one aluminum solid electrolytic capacitor having an output density which is at or above 10,000 W/kg. This arrangement accomplishes an electric power storage device with a high output density which cannot be achieved by the EDLC bank alone. Consequently, the arrangement is suitable for a case where input and output of a large power are each performed in a short period of time.

Please replace paragraph starting at page 9, 2<sup>nd</sup> full paragraph (lines 7-24), with the following rewritten paragraph:

A first embodiment of the invention will be described with reference to FIGS. 1 to 5. Referring to FIG. 1, a power control unit 1 of the first embodiment is shown. A power supply 2 such as a commercial AC power supply is connected via an input terminal 1a of the power control device 1 to an AC input terminal of a converter 3 comprising bridge-connected switching elements such as IGBTs (~~Insulated~~ insulated gate bipolar transistors). The converter 3 converts an AC power supplied to the AC input terminal thereof to a corresponding DC power which is delivered from a DC output terminal thereof. The DC output terminal of the converter 3 is connected both to a charge and discharge terminal 4a (see FIG. 4) of an electric double layer capacitor (EDLC) bank 4 and to a DC input terminal of an inverter 5. The inverter 5 also comprises bridge-connected switching elements such as IGBTs. The inverter 5 has an AC output terminal connected via an output terminal 1b of the power control device 1 to a load 6. The inverter 5 supplies to the load 6 electric power with set voltage, current, frequency and phase.

Please replace paragraph starting at page 10, 1<sup>st</sup> full paragraph (lines 5-16), with the following rewritten paragraph:

Referring now to FIG. 2, an electrical arrangement of the EDLC bank 4 serving as an electric power storage device is shown. The EDLC bank 4 includes a plurality of parallel-connected rows of EDLC units 11, each of which rows includes a plurality of series-connected EDLC units 11. One end of a circuit composed of the EDLC ~~devices~~ units 11 connected as described-above is connected to the charge and discharge terminal 4a, whereas the other end of the circuit is grounded. Bank changing means (not shown) is provided for changing between series and parallel connection of the EDLC bank 4 at the command of the EDLC bank control 10 so that a charged and discharged state of the EDLC bank 4, a charging current and a discharging current are controlled.